FLUOROQUINOLONES Levofloxacin, Ciprofloxacin, Ofloxacin Fact Sheet

These are complex molecules related to the urinary antiseptic nalidixic acid. They are broad spectrum antibiotics.

Doses: Levofloxacin – 500 mg daily

Ofloxacin – 800 mg daily

Ciprofloxacin – 500-750 mg twice a day Alter dosage with impaired renal function.

Administration: Oral or IV

Excretion: Levofloxacin and Ofloxacin – renal

Ciprofloxacin – hepatic/ renal

Distribution: Good tissue concentration including bone; poor-moderate

CSF penetration

Adverse Reactions

Gastrointestinal

1. Nausea, vomiting, diarrhea reported commonly. Minor abnormalities in liver enzymes also reported.

Neurotoxicity

1. Tremors, restlessness, light-headedness and confusion may occur. More serious reactions, such as seizures and psychosis may also occur.

Other

1. Pseudomembranous colitis, thrombophlebitis and crystalluria.

Drug Interactions

- 1. Ciprofloxacin increases serum concentration of theophylline, warfarin and caffeine. These reactions have also been reported rarely with levofloxacin.
- 2. Ciprofloxacin increases serum creatinine in patients on cyclosporine.
- 3. Absorption of both is reduced by medications containing Al, Mg, Fe and Ca.
- 4. Concomitant use of NSAIDS may increase risk of CNS reactions.

Monitoring

- 1. Theophylline concentration and pro time should be monitored in patients on theophylline and warfarin.
- 2. Creatinine or liver enzymes in patients with renal or hepatic dysfunction.